

# 505CA multichannel cassette pumphead

# 500series

Watson-Marlow Pumps

## FEATURES AND BENEFITS

- Flow rates from 0.6 microlitres to 42 ml/min (0.67 USGPH)
- Flow adjustment through 20 tube sizes and drive speed up to 170rpm
- Fine, lockable 30 turn occlusion scale for fine tuning of flows
- Flow rates accuracy from 0.5%
- Single pumpheads from 4 to 16 channels
- Extension pumpheads to take the pump up to 48 channels
- Cassettes have a sprung track for ideal flow and pressure performance
- 8 driven rollers on planetary gear drive for ultra low pulsation
- Separate dedicated cassette release lever
- Two year comprehensive warranty



*Watson-Marlow...Innovation in Full Flow*

## TECHNICAL DATA

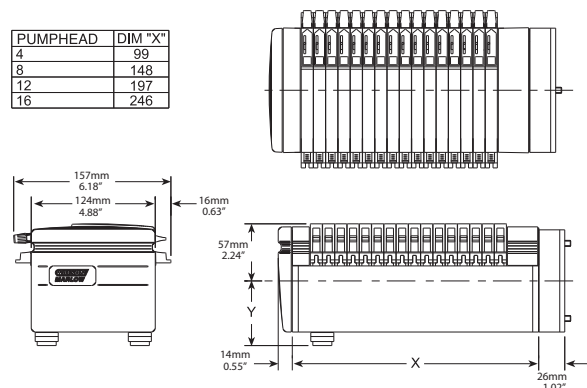
		Tube bore and flow rates (ml/min)				
	Speed rpm	0.13mm	0.19mm	0.25mm	0.38mm	0.50mm
520S, 520U	0.1-55	0.0006-0.061	0.009-0.09	0.0014-0.16	0.0024-0.27	0.004-0.44
520Du, 505Di	0.1-55	0.0003-0.061	0.004-0.09	0.0007-0.16	0.0012-0.27	0.002-0.44
Max permissible speed	170	0.19	0.29	0.44	1.22	1.90

		Tube bore and flow rates (ml/min)				
	Speed rpm	0.63mm	0.76mm	0.88mm	1.02mm	1.14mm
520S, 520U	0.1-55	0.008-0.79	0.010-1.16	0.014-1.54	0.20-2.04	0.022-2.51
520Du, 505Di	0.1-55	0.004-0.79	0.005-1.16	0.007-1.54	0.009-2.04	0.01-2.51
Max permissible speed	170	2.82	3.81	5.51	7.11	8.84

		Tube bore and flow rates (ml/min)				
	Speed rpm	1.29mm	1.42mm	1.47mm	1.52mm	1.65mm
520S, 520U	0.1-55	0.030-3.22	0.034-3.32	0.038-4.14	0.040-4.37	0.046-5.05
520Du, 505Di	0.1-55	0.015-3.22	0.017-3.32	0.019-4.14	0.020-4.37	0.023-5.05
Max permissible speed	170	11.2	13.6		14.5	17.4

		Tube bore and flow rates (ml/min)				
	Speed rpm	1.85mm	2.05mm	2.38mm	2.54mm	2.79mm
520S, 520U	0.1-55	0.060-6.31	0.070-7.60	0.090-9.84	0.11-11.0	0.12-12.8
520Du, 505Di	0.1-55	0.029-6.31	0.035-7.60	0.045-9.84	0.050-11.0	0.060-12.8
Max permissible speed	170	21.4	26.0	31.2	36.5	41.6

## TECHNICAL SPECIFICATION



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Weight	505CA4	2.7kg (5lb 15oz)
	505CA8	3.8kg (8lb 6oz)
Standards	505CA12	5.0kg (11lb)
	505CA16	6.2kg (13lb 11oz)
	505CAX12	4.7kg (10lb 6oz)
	505CAX16	5.9kg (13lb)
CE, BS EN 50082-1, BS EN 61010-1, BS EN (IP31)		

## MATERIALS OF CONSTRUCTION

Component	Material
Drive external	Aluminium case upper, painted steel base, polyester keypad
Cassette	Verton body, Kematal track and leg (standard) Verton body/PVDF track and leg (optional) Stainless steel pins
Pumphead body	Aluminium chassis, brass sun gear, Acetal planetary gear
Rotor	Stainless steel rollers, aluminium end plates
Guard	Verton gear guards and end cover

## ORDER INFORMATION

Product codes	
Description	Partcode
505CA4	053.4202.000
505CA8	053.4222.000
505CA12	053.4242.000
505CA16	053.4262.000
505CAX12	053.3442.000
505CAX16	053.3462.000

Tube ordering codes						
Manifold pump tubing for 505CA						
Colour code	Tube	Marpene*	PVC	Silicone	Solvent	Acid
Orange/black	0.13		980.0013.000		984.0013.000	
Orange/red	0.19		980.0019.000		984.0019.000	
Orange/blue	0.25	978.0025.000	980.0025.000		984.0025.000	
Orange/green	0.38	978.0038.000	980.0038.000		984.0038.000	
Orange/yellow	0.50	978.0050.000	980.0050.000		984.0050.000	986.0050.000
Orange/white	0.63	978.0063.000	980.0063.000	982.0063.000	984.0063.000	986.0063.000
Black/black	0.76	978.0076.000	980.0076.000	982.0076.000	984.0076.000	986.0076.000
Orange/orange	0.88	978.0088.000	980.0088.000	982.0088.000	984.0088.000	986.0088.000
White/white	1.02	978.0102.000	980.0102.000	982.0102.000	984.0102.000	986.0102.000
Red/red	1.14	978.0114.000	980.0114.000	982.0114.000	984.0114.000	986.0114.000
Grey/grey	1.29	978.0129.000	980.0129.000	982.0129.000	984.0129.000	986.0129.000
Yellow/yellow	1.42	978.0142.000	980.0142.000	982.0142.000	984.0142.000	986.0142.000
Yellow/blue	1.52	978.0152.000	980.0152.000	982.0152.000	984.0152.000	986.0152.000
Blue/blue	1.65	978.0165.000	980.0165.000	982.0165.000	984.0165.000	986.0165.000
Green/green	1.85	978.0185.000	980.0185.000	982.0185.000	984.0185.000	986.0185.000
Purple/purple	2.05	978.0205.000	980.0205.000	982.0205.000	984.0205.000	986.0205.000
Purple/black	2.38	978.0238.000	980.0238.000	982.0238.000	984.0238.000	986.0238.000
Purple/orange	2.54	978.0254.000	980.0254.000	982.0254.000	984.0254.000	986.0254.000
Purple/white	2.79	978.0279.000	980.0279.000	982.0279.000	984.0279.000	986.0279.000

All flow rates shown were obtained pumping water at 20°C (68°F) with zero suction and delivery heads. Watson-Marlow, Bioprene and Marprene are trademarks of Watson-Marlow Limited. Disclaimer: The information contained in this document is believed to be correct but Watson-Marlow Limited accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. LoadSure is a trademark of Watson-Marlow Limited. © STA-PURE PFL and © STA-PURE PCS are registered trademarks of W.L. Gore & Associates Inc. Please state the product code when ordering pumps and tubing.

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Pumps**

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